

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

**Claim 1 (currently amended):** An imaging optical system for imaging ~~on a predetermined surface~~ information on an object surface in a region having a length (A) in a long side direction and a length (B) in a short side direction which satisfy a relation of  $A/B > 10$ , on an image plane, comprising:

a diaphragm;

a first set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the object surface side from the diaphragm; and

a second set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the image ~~surface~~ plane side from the diaphragm,

wherein an optical path of a light beam passing through a center of the diaphragm and a center of ~~an image obtained through the imaging~~ the image plane is deflected by the off-axial reflection surfaces within a surface perpendicular to the long side direction of the ~~object~~ region to undergo crossing at least once,

wherein all of the off-axial reflection surfaces satisfy a conditional expression:

$$|P|S < 0.5$$

where P ( $\text{mm}^{-1}$ ) represents an optical power of the off-axial reflection surface within the surface perpendicular to the long side direction and S (mm) represents a distance from the off-axial reflection surface to a subsequent one of the off-axial reflection surfaces along a reference axis.

**Claim 2 (previously presented):** An imaging optical system according to claim 1,  
wherein the crossing of the optical path is caused on the object surface side from the diaphragm.

**Claim 3 (canceled).**

**Claim 4 (currently amended):** An imaging optical system for imaging ~~on a predetermined surface~~ information on an object surface in a region having a length (A) in a long side direction and a length (B) in a short side direction which satisfy a relation of  $A/B > 10$ , on an image plane, comprising:

a diaphragm;

a first set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the object surface side from the diaphragm; and

a second set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the image ~~surface~~ plane side from the diaphragm,

wherein an optical path of a light beam passing through a center of said diaphragm and a center of ~~an image obtained through the imaging~~ the image plane is deflected by ~~said~~ the off-axial reflection surfaces within a surface perpendicular to ~~said~~ the long side direction of the ~~object~~ region to undergo crossing at least once, and,

wherein the number (X) of off-axial reflection surfaces included in the first set of the plurality of off-axial reflection surfaces and the number (Y) of off-axial reflection surfaces included in the second set of the plurality of off-axial reflection surfaces satisfy a relation:

$$0.65 < X/Y < 1.6.$$

**Claim 5 (currently amended):** An imaging optical system according to claim 1, wherein the crossing of the optical path is caused on both the object surface side and the image ~~surface~~ plane side from the diaphragm.

**Claim 6 (currently amended):** An imaging optical system according to claim 1, wherein optical powers applied by the reflection surfaces of the imaging optical system to the long side direction of the ~~imaged~~ region are all positive.

**Claim 7 (original):** An imaging optical system according to claim 1, wherein an intermediate image is not formed in the optical path.

**Claim 8 (currently amended):** An image reading apparatus comprising:

the imaging optical system according to claim 1; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 9 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 2; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 10 (canceled)**

**Claim 11 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 4; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 12 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 5; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 13 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 6; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 14 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 7; and  
a line sensor arranged substantially in ~~[[an]] the image surface plane~~ position of the imaging  
optical system and adapted to convert a formed image to an electrical signal.